

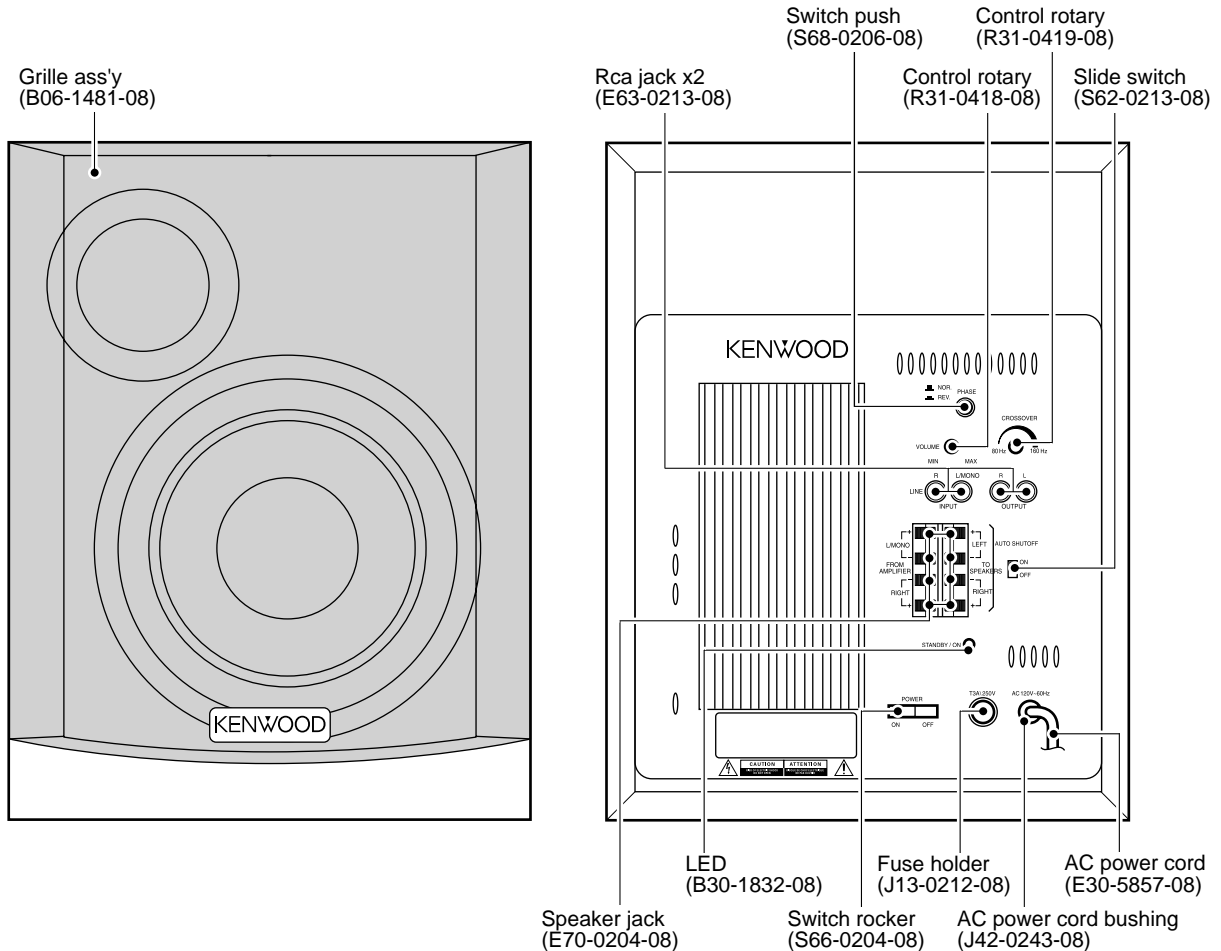
POWER SUBWOOFER

KS-303HT

SERVICE MANUAL

KENWOOD

© 2000-2/B51-5599-00 (K/K) 1360



SPECIFICATIONS

Front speaker, Center speaker, Rear speaker

	Front speaker	Center speaker	Rear speaker
system	2 way (Magnetically shielded)	2 way (Magnetically shielded)	1 way
Enclosure	Acoustic Air Suspension	Acoustic Air Suspension	Acoustic Air Suspension
Loudspeaker			100 mm(4") Cone type (Full Range type)
Woofer:	100 mm(4") Cone type	100 mm(4") Cone type	—
Tweeter:	50 mm(2") Cone type	50 mm(2") Cone type	—
Nominal Impedance	8 Ω	8 Ω	8 Ω
Peak Input Power	—	80W	80W
Maximum Input Power	80W	40W	40W
Sensitivity	88dB/Wat 1m	88dB/Wat 1m	85dB/Wat 1m
Frequency Response	100Hz ~ 20,000 Hz	100Hz ~ 20,000 Hz	100Hz ~ 20,000 Hz
Crossover Frequency	3,000 Hz	3,000 Hz	—
Dimensions	Width: 129mm(5-1/16") Height: 198mm(7-13/16") Depth: 120mm(4-3/4")	Width: 129mm(5-1/16") Height: 198mm(7-13/16") Depth: 120mm(4-3/4")	Width: 129mm(5-1/16") Height: 198mm(7-13/16") Depth: 120mm(4-3/4")
Net Weight	1.2kg(2.6lb)/piece	1.0kg(2.2lb)	0.8kg(1.8lb)/Piece

NOTE: THE GRILLES ON ALL SPEAKERS CANNOT BE REMOVED.

Notes:

1. Kenwood follows a policy of continuous advancements in development. For this reason, specifications may be changed without notice.
2. Full performance may not be exhibited in extremely cold locations (below 0 deg. C).

Subwoofer

	System	Subwoofer system with built-in amplifier
Audio section	Output Power	50 Watts RMS, at 4Ω from 40 Hz to 160 Hz with no more than 0.09% total harmonic distortion
	Input Sensitivity/Impedance	100 mV/43 kΩ, 200 mV/43 kΩ (MONO)
	RCA-type pin-plug jack (LINE IN):	1.8V/1.2 kΩ
	Push-type terminals:	1.8V/1.2 kΩ
Speaker section	Turn Over Frequency	80 Hz ~ 160 Hz
	Phase Switching	NORMAL, REVERSE
	Enclosure	Bass-Reflex
	Loudspeaker	200 mm (8") Cone type
General	Nominal Impedance	4 Ω
	Frequency Response	40 Hz ~ 250 Hz
	Power Consumption	110 W
	Supply Voltage	AC120 V, 60 Hz
	Dimensions	Width: 286 mm (11-1/4") Height: 368 mm (14-1/2") Depth: 356 mm (14")
	Net Weight	11.2 kg (24.7 lb)
	Enclosure Finish	High density particle board laminated with simulated wood grain vinyl.



KS-303HT

CONTENTS / ACCESSORIES

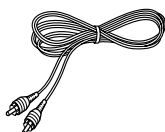
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Accessories

Pin-plug cord (1)
(E30-5839-08)



Speaker wires (5)
(W01-1088-08)



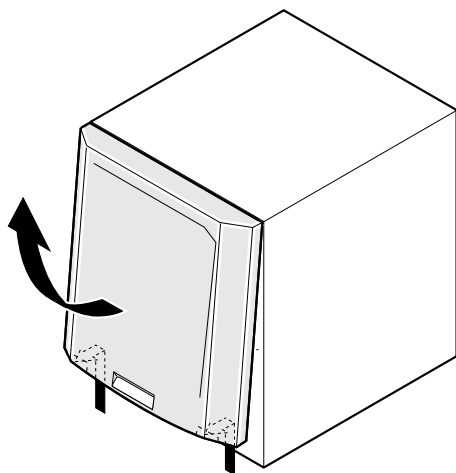
Cushions (4)
(G13-1141-08)



DISASSEMBLY FOR REPAIR

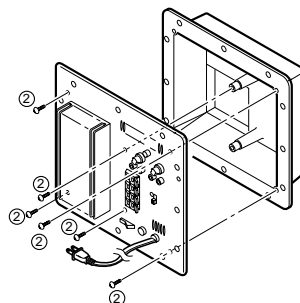
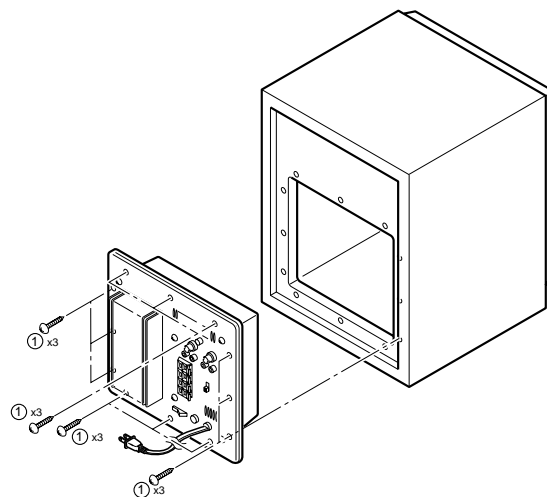
How to Remove the Grille Ass'y

1. You need to remove the grille ass'y if replace the sub-woofer.
2. Insert the screw driver to the gaps of the grille ass'y and lift it up.

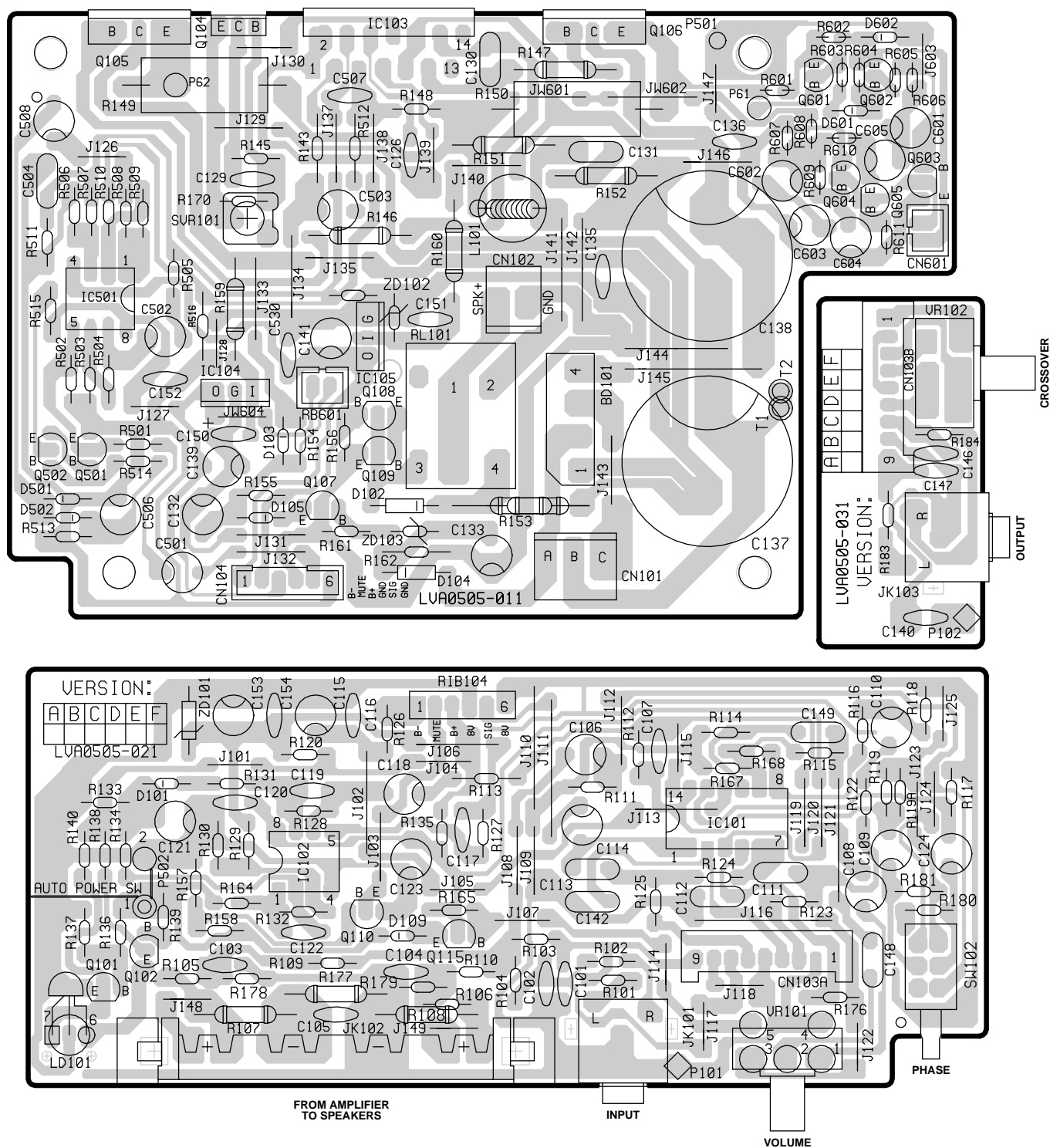


How to Remove the Amplifier

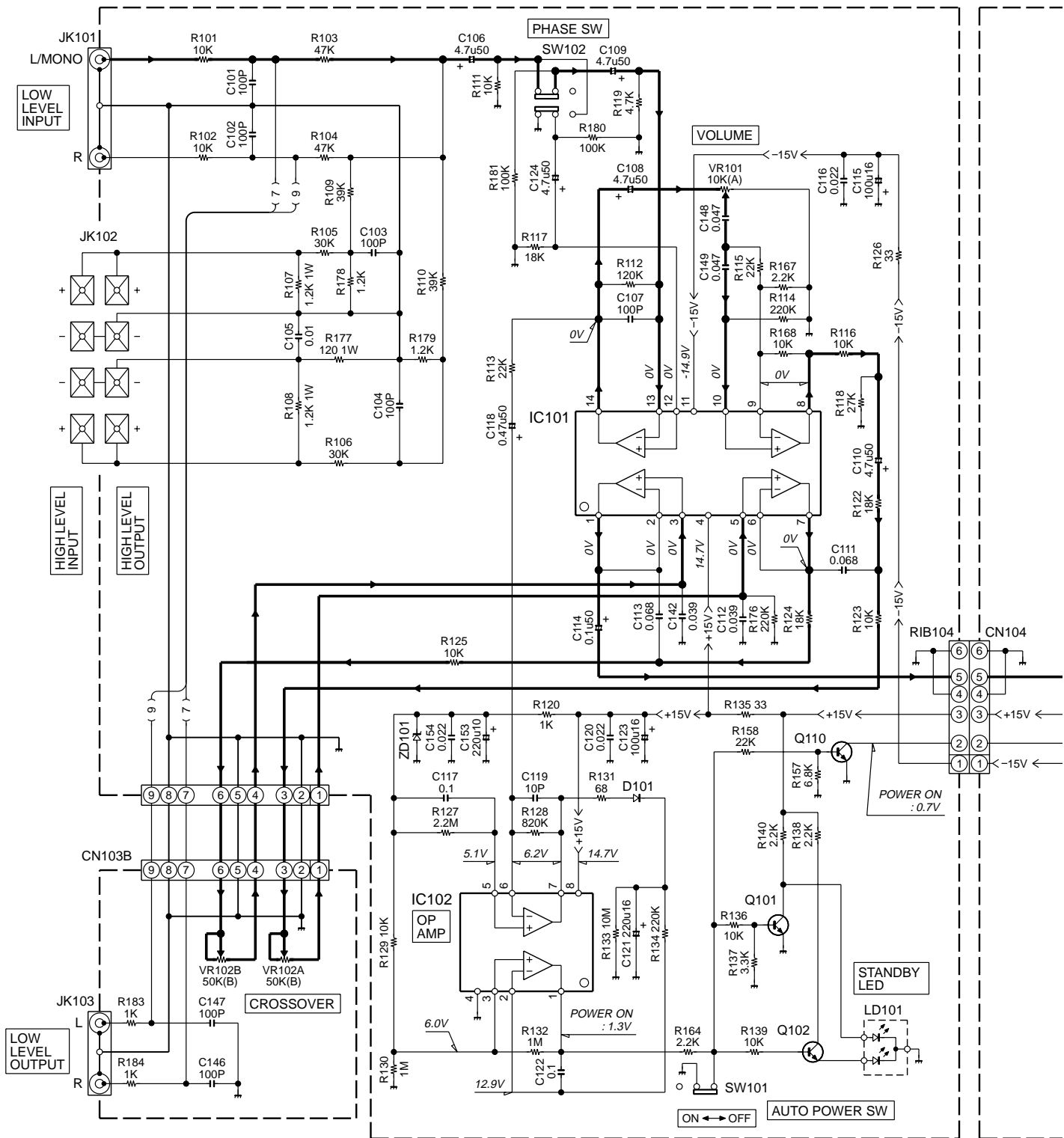
1. Remove screws fixed the rear panel to the enclosure.
2. Remove screws fixed the rear panel to the amplifier cover.



PC BOARD (Component side view)



Refer to the schematic diagram for the value of resistors and capacitors.



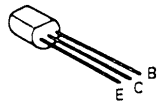
IC101 : TL074CN
 IC102,501 : NJM4558D
 IC103 : UPC1298V
 IC104 : TA7815S
 IC105 : TA79015S

Q101,102,108-110,501,
 502,601,603-605 : 2SC945(Q,P)
 Q104 : 2SD882
 Q105 : 2SC5198(O)
 Q106 : 2SA1941(O)
 Q107,602 : 2SA733A(P)

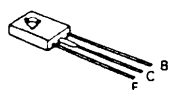
D101,103,105,501,502,
 601,602 : 1N4148
 D102,104 : 1N4001
 ZD103 : MTZJ18B
 ZD101 : MTZJ6.2B
 BD101 : RS402L

— SIGNAL LINE
 — GND LINE
 <+B> +B LINE
 <-B> -B LINE

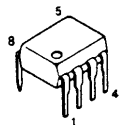
2SA733A
 2SC945



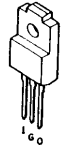
2SD882



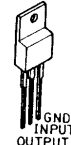
NJM4558D



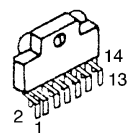
TA7815S



TA79015S

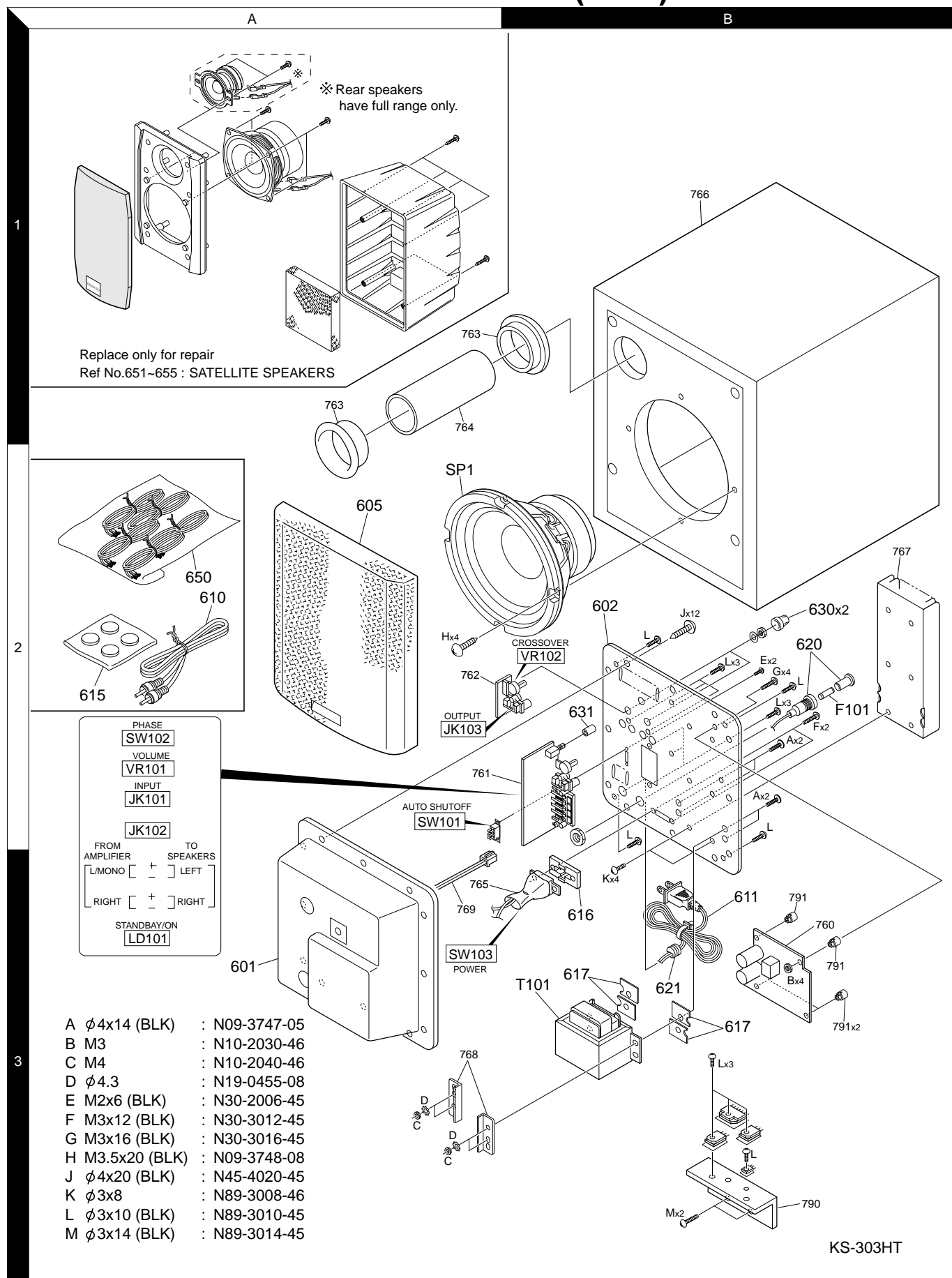


UPC1298V



KS-303HT

EXPLODED VIEW (UNIT)



Parts with exploded numbers larger than 700 are not supplied.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

①

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
KS-303HT						
601 602	3A 2B	*	A02-2535-08 A23-5503-08	COVER, REAR PLT,BPA0025-000 REAR PLATE GAL0071-010		
605 - - -	2A	*	B06-1481-08 B46-0328-03 B46-0347-03 B61-1062-00	GRILLE ASSY WARRANTY CARD WARRANTY CARD INSTRUCTION	K P	
△ C1			C91-0647-05	CERAMIC 0.010UF	P	
610 △ 611	2A 3B	*	E30-5839-08 E30-5857-08	AUDIO CORD LINE CORD 47455-D65		
△ F101	2B	*	F50-0169-08	FUSE,3A,250V KSA2300-101		
615 616 617	2A 3B 3B	*	G13-1141-08 G16-0207-08 G16-0208-08	CUSHION RUBBER,BLK HARD,BRF0007-001 RUBBER,SW200 ICU0007-002		
- - - - - -		*	H10-8168-08 H10-8170-08 H10-8171-08 H25-2286-08 H25-2294-08	POLYSTYRENE FOAM,WOOFER POLYSTYRENE FOAM,SATELLITE(TOP) POLYSTYRENE FOAM,SATELLITE(BTM) PROTECTION BAG ,WOOFER PROTECTION BAG ,SATELLITE		
- -		*	H51-1481-08 H51-1482-08	ITEM CARTON CASE,SATELLITE ITEM CARTON CASE,WOOFER		
△ 620 △ 621	2B 3B	*	J13-0212-08 J42-0243-08	FUSE HOLDER DFH1229-001 AC LINE BUSH DBU3050-010		
630 631	2B 2B	*	K23-0540-08 K23-0541-08	KNOB,BLK BPK5018-003 PUSH KNOB,BLK BPK8015-002		
△ T101	3B	*	L07-3027-08	POWER TRANSFORM,TTI1201-004		
D H		*	N19-0455-08 N09-3748-08	WASHER,4.3 HWT8540-110 SCREW,M3.5X20,BLK,H011103-320		
△ R1			R92-1844-05	CARBON 3.3M J 1/2W		
SW101 △ SW103	2A 3B	*	S62-0213-08 S66-0204-08	SW,SLIDE MSS9477-034 SW ROCKER MSV0001-004		
SP1	2A	*	T10-0953-05	SPK DRIVER FDW6080-312		
650	2A	*	W01-1088-08	SPK CORD ASSY		
651 652 653 654 655	1A 1A 1A 1A 1A	*	X20-2500-10 X20-2490-11 X20-2490-10 X20-2510-11 X20-2510-10	SATELLITE SP CENTER SATELLITE SP FRONT,L SATELLITE SP FRONT,R SATELLITE SP REAR,L SATELLITE SP REAR,R		
ELECTRICAL PARTS						
LD101	3A	*	B30-1832-08	LED KEM0001-001		
C101-104 C105 C106 C107 C108-110			CK45FB1H101K CK45FB1H103Z CE04KW1H4R7M CK45FB1H101K CE04KW1H4R7M	CERAMIC 100PF K CERAMIC 0.010UF Z ELECTRO 4.7UF 50WV CERAMIC 100PF K ELECTRO 4.7UF 50WV		

L : Scandinavia K : USA P : Canada R : Mexico C : China I : Malaysia
Y : PX(Far East,Hawaii) T : England E : Europe G : Germany V : China(Shanghai)
Y : AAFES(Europe) X : Australia Q : Russia H : Korea M : Other Areas △ indicates safety critical components .

* New Parts
Parts without **Parts No.** are not supplied.
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Teile ohne **Parts No.** werden nicht geliefert.

②

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C111 C112 C113 C114 C115			CQ92FM2A683J CQ92FM2A393J CQ92FM2A683J CE04KW1H0R1M CE04KW1C101M	MYLAR 0.068UF J MYLAR 0.039UF J MYLAR 0.068UF J ELECTRO 0.1UF 50WV ELECTRO 100UF 16WV		
C116 C117 C118 C119 C120			CK45FB1H223Z CK45FB1H104Z CE04KW1HR47M CC45FSL1H100D CK45FB1H223Z	CERAMIC 0.022UF Z CERAMIC 0.10UF Z ELECTRO 0.47UF 50WV CERAMIC 10PF D CERAMIC 0.022UF Z		
C121 C122 C123 C124 C126			CE04KW1C221M CK45FB1H104Z CE04KW1C101M CE04KW1H4R7M CC45FSL1H330J	ELECTRO 220UF 16WV CERAMIC 0.10UF Z ELECTRO 100UF 16WV ELECTRO 4.7UF 50WV CERAMIC 33PF J		
C129 C130 C131 C132 C133			CK45FB1H102K CQ92FM2A683J CQ92FM2A393J CE04KW1C470M CE04KW1H100M	CERAMIC 1000PF K MYLAR 0.068UF J MYLAR 0.039UF J ELECTRO 47UF 16WV ELECTRO 10UF 50WV		
C135,136 C137,138 C139 C141 C142			CK45FB1H104Z CE04KW1H332M CE04KW1C101M CE04KW1C101M CQ92FM2A393J	CERAMIC 0.10UF Z ELECTRO 3300UF 50WV ELECTRO 100UF 16WV ELECTRO 100UF 16WV MYLAR 0.039UF J		
C146,147 C148,149 C150-152 C153 C154			CK45FB1H101K CQ92FM2A473J CK45FB1H104Z CE04KW1A221M CK45FB1H223Z	CERAMIC 100PF K MYLAR 0.047UF J CERAMIC 0.10UF Z ELECTRO 220UF 10WV CERAMIC 0.022UF Z		
C501 C502 C503 C504 C506			CE04KW1H2R2M CE04KW1H010M CE04KW1C470M CQ92FM2A104J CE04KW1H100M	ELECTRO 2.2UF 50WV ELECTRO 1.0UF 50WV ELECTRO 47UF 16WV MYLAR 0.10UF J ELECTRO 10UF 50WV		
C507 C508 C530 C601 C602,603			CC45FSL1H150J CE04KW1H100M CK45FB1H104Z CE04KW1H100M CE04KW1C101M	CERAMIC 15PF J ELECTRO 10UF 50WV CERAMIC 0.10UF Z ELECTRO 10UF 50WV ELECTRO 100UF 16WV		
C604,605			CE04KW1H100M	ELECTRO 10UF 50WV		
JK101 JK102 JK103	2A 2A 2A	*	E63-0213-08 E70-0204-08 E63-0213-08	RCA JACK CTP0005-002 SPK JACK CTP0004-002 RCA JACK CTP0005-002		
L101		*	L90-0403-08	COIL 1UH SHR6619-001		
R107,108 R146,147 R149,150 R151,152 R153		*	RS14GB3A122J RD14BB2H100J R92-2330-08 RD14BB2H4R7J RS14GB3D561J	FL-PROOF RS 1.2K J 1W RD 10 J 1/2W FL-PROOF RS 0.22 J 3W RD 4.7 J 1/2W FL-PROOF RS 560 J 2W		
△ R159 △ R160 R177			RS14GB3D331J RD14BB2H681J RS14GB3A121J	FL-PROOF RS 330 J 2W RD 680 J 1/2W FL-PROOF RS 120 J 1W		

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PARTS LIST

KS-303HT

PARTS LIST

Ref. No	Add- ress	New Parts	Parts No.	Description		Desti- nation	Re- marks
VR101	2A	*	R31-0418-08	CNTL ROTARY	MRR0103-002		
VR102	2B	*	R31-0419-08	CNTL ROTARY	MRR0503-012		
RL101	2A	*	S76-0208-08	RELAY	MRL2212-005		
SW102		*	S68-0206-08	SW PUSH	MSP0001-006		
BD101		*	RS402L	DIODE			
D101			1N4148	DIODE			
D102			1N4001	DIODE			
D103			1N4148	DIODE			
D104			1N4001	DIODE			
D105			1N4148	DIODE			
D501,502			1N4148	DIODE			
D601,602			1N4148	DIODE			
IC101		*	TL074CN	IC			
IC102			NJM4558D	IC(OP AMP X2)			
IC103			UPC1298V	IC(POWER AMP DRIVER)			
IC104			TA7815S	IC(VOLTAGE REGULATOR/ +15V)			
IC105		TA79015S	IC(VOLTAGE REGULATOR/ -15V)				
IC501		NJM4558D	IC(OP AMP X2)				
Q101,102		2SC945(Q,P)	TRANSISTOR				
Q104		2SD882	TRANSISTOR				
Q105		2SC5198(O)	TRANSISTOR				
Q106		2SA1941(O)	TRANSISTOR				
Q107		2SA733A(P)	TRANSISTOR				
Q108-110		2SC945(Q,P)	TRANSISTOR				
Q501,502		2SC945(Q,P)	TRANSISTOR				
Q601		2SC945(Q,P)	TRANSISTOR				
Q602		2SA733A(P)	TRANSISTOR				
Q603-605		2SC945(Q,P)	TRANSISTOR				
ZD101		MTZJ6.2B	ZENER DIODE				
ZD103		MTZJ18B	ZENER DIODE				

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Note:

Component and circuit are subject to modification under differing local conditions. This manual is based on Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

KENWOOD CORPORATION

- 14-6,Dogenzaka 1-chome, Shibuya-ku, Tokyo, 150-8501 Japan
KENWOOD SERVICE CORPORATION
P.O.BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745, U.S.A.
KENWOOD ELECTRONICS CANADA INC.
6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8
KENWOOD ELECTRONICS LATIN AMERICA S.A.
P.O.BOX 562791, Pso 6 plaza Chase, Cl. 47 y Aquilino de la Guardia Panama, Republic de Panama
KENWOOD ELECTRONICS BRASIL LTDA.
Av. Moerna, 170-17, Andar-Cobertura "B", Ed. Maximum Service Center, 04077-020
Moerna, São Paulo-SP-Brasil
KENWOOD ELECTRONICS U.K. LIMITED
KENWOOD House, Dwight Road, Watford, Herts., WD1 8EB., United Kingdom
KENWOOD ELECTRONICS BELGUM N.V.
Meachelsteenseweg 418, B-1930 Zaventem, Belgium
KENWOOD ELECTRONICS DEUTSCHLAND GMBH
Rembrucker Str. 15, 63150 Heusenstamm, Germany
KENWOOD ELECTRONICS FRANCE S.A.
13 Boulevard Ney, 75018 Paris, France

KENWOOD ELECTRONICS ITALIA S.p.A.

- Via G. Sironi, 719 20129, Milano, Italy
KENWOOD IBÉRICA S.A.
Bolivia, 239-08020 Barcelona, Spain
KENWOOD ELECTRONICS AUSTRALIA PTY. LTD.
(A.C.N. 001 499 074)
KENWOOD ELECTRONICS (HONG KONG) LTD.
16 Giffnock Avenue, North Ryde, N.S.W. 2113, Australia
Unit 3712-3724, Level 37, Tower 1, Metroplaza, 223 Hing Fong Road, Kwai Fong N.T., Hong Kong
KENWOOD ELECTRONICS GULF FZE
P.O.Box 61318, Jebel Ali, Dubai, U.A.E.
KENWOOD ELECTRONICS SINGAPORE PTE LTD.
No. 1 Genting Lane #02-02, KENWOOD Building, Singapore, 349544
KENWOOD ELECTRONICS (MALAYSIA) SDN BHD.
#4,01 Level 4, Wisma Academy Lot 4A, Jalan 19/1 46300 Petaling Jaya Selangor Darul Ehsan Malaysia
KENWOOD ELECTRONICS (THAILAND) CO., LTD.
2019 New Pechurin Road, Bangkok, Huaykwang, Bangkok, 10320 Thailand